

1. (Amended) A method for controlling a graphical element on a display through manipulation of an input device, the method comprising:

[-] [a measuring step] measuring a plurality of components of a magnetic field related to an orientation of the input device[,]; and

[-] [a control step] controlling the graphical element on the basis of the plurality of components,

[characterised] characterized in that the [control] controlling step includes [a calculation step] calculating a first signal on the basis of at least two of the plurality of components, the first signal representing a translation movement of the graphical element in a first direction on the display.

2. (Amended) A method as claimed in Claim 1, wherein the [calculation] calculating step further [includes] comprises calculating a second signal on the basis of at least two of the plurality of components, at least one of the at least two of the plurality of components being different from the at least two components used for calculating the first signal, the second signal representing a translation movement of the graphical element in a second direction on the display.

3. (Amended) A method as claimed in Claim 1, wherein the [control] controlling step includes an [initialisation] initialization step for measuring reference values of the plurality

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of components with respect to [the] an orientation of the input device at [the] an instant of executing the [initialisation] initialization step, and wherein the calculating step calculates the first signal on the basis of a difference between current values and the reference values of respective ones of the at least two of the plurality of components.

4. (Amended) A method as claimed in Claim 3, wherein in said initialization step the measuring step measures three components of the magnetic field [thus measuring] resulting in a measurement of the strength of the magnetic field, and wherein the

5 [initialisation] initialization step is executed if the difference in strength of the magnetic field, between two successive executions of the measuring step, is larger than a predetermined threshold.

5. A method as claimed in Claim 1, wherein the magnetic field is generated by a permanent magnet or an electromagnet.

6. (Amended) An input device for controlling a graphical element on a display, the input device comprising:

[-] a plurality of sensors for measuring respective components of a magnetic field related to an orientation of the input

5 device[,]; and

[-] a controller for controlling the graphical element on the basis of the plurality of components,

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10 [characterised] characterized in that the controller includes calculation means for calculating a first signal on the basis of data from at least two of the plurality of sensors, the first signal representing a translation movement of the graphical element in a first direction on the display.

7. (Amended) An input device as claimed in Claim 6, wherein the calculation means [are] further [arranged for calculating] calculates a second signal on the basis of data from at least two of the plurality of sensors, at least one of the at least two of the plurality of sensors being different from the at least two sensors [for] used in calculating the first signal, the second signal representing a translation movement of the graphical element in a second direction on the display.

8. (Amended) An input device as claimed in Claim 6, wherein said input device further [comprising] comprises reset means for measuring reference data of the plurality of sensors with respect to [the] an orientation of the input device, and wherein the calculating means [are arranged for calculating] calculates the first signal on the basis of a difference between current data and the reference data of respective ones of the at least two of the plurality of sensors.

9. An input device as claimed in Claim 6, wherein at least one of the plurality of sensors is an MR (magnetoresistive) sensor.

10. (Amended) An input device as claimed in Claim 6, wherein  
two of the plurality of sensors comprise an MR sensor, and wherein  
a third of the plurality of sensors comprises a Hall sensor, the  
three sensors being manufactured on a single substrate.

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